

REMARKS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1, 4-33, 37 and 39 are pending in this application.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current Amendment. The attached is captioned "**Version With Markings to Show Changes Made.**"

Priority Under 35 U.S.C. §119:

The Office Action failed to acknowledge Applicant's claim for foreign priority under 35 U.S.C. §119 and receipt of certified copies of priority documents. Applicant therefore respectfully requests that the next Office Action indicate acknowledgement of Applicant's claim for foreign priority under 35 U.S.C. §119 and receipt of certified copies of the priority documents.

The Notification of Acceptance of Application under 35 U.S.C. §371 (FORM PCT/DO/EO/903) acknowledges receipt of the priority documents.

Rejection Under 35 U.S.C. §103:

Claims 1-39¹ were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Takeuchi et al (U.S. '456, hereinafter "Takeuchi") in view of Dent et al (U.S. '878, hereinafter "Dent").

In order to establish a prima facie case of obviousness, all of the claimed limitations must be taught or suggested by the prior art. Applicant respectfully submits that the combination of Takeuchi and Dent fails to teach or suggest all

¹ Applicant notes that claim 38 was canceled in the Preliminary Amendment dated November 6, 2000.

of the claimed limitations. For example, Applicant submits that the combination fails to teach or suggest sampling the usage of network resources by an individual terminal and comparing a measurement of this sampled usage with measurements or calculations made by or at the individual terminal as required by independent claim 1 and its respective dependents.

One goal of the present invention is to try to minimize the amount of traffic flowing through a network which is purely for the purpose of measuring network usage by users so that they can be billed on the basis of their usage. The present invention resolves this technical problem by having at least some of the work being performed by each terminal. Unfortunately, this solution is susceptible to a user interfering with the measurements taken at their own respective terminal in an attempt to defraud the network operator. The present invention avoids this problem by sampling the actual network usage of the individual terminal and checking that it does indeed correspond to the usage and/or cost reported by the corresponding terminal for policing purposes.

Neither Takeuchi nor Dent discloses performing the measurement of network usage for the purposes of billing users by a network operator, except in the conventional centralized manner. Neither of these references therefore teaches or suggests performing sampling of the network usage of an individual terminal and comparing this with measurements of usage and/or cost reported by the corresponding terminal.

With respect to independent claim 26, Applicant respectfully submits that the combination of Takeuchi and Dent fails to disclose a packet router

determining a class of service for packets and scheduling packets differently depending on the respective class of service. The Office Action apparently alleges that col. 7, line 60 to col. 8, line 23 and Figs. 5, 10 and 11 of Takeuchi teach or suggest this feature. Applicant respectfully disagrees. In particular, col. 7, lines 60-67 discloses a relay network being selected according to the caller's will or option. Accordingly, this portion of Takeuchi (and all other portions of Takeuchi and Dent) fails to disclose a router determining a class of service for packets and scheduling packets differently depending on the respective class of service. Similar comments apply to independent claim 37.

Independent claim 27 requires calculating an edge price for data transmission as claimed. Applicant submits that neither Takeuchi nor Dent discloses this claimed feature. Accordingly, even if these references were combined as proposed by the Office Action, the combination would not have taught or suggested all of the claimed limitations. The Office Action fails to even allege that the combination teaches or suggests calculating an edge price.

Independent claim 29 requires, *inter alia*, measuring a quantity of data flowing from an originating customer into the network *and* the quantity of data flowing out of the network to a destination customer. Applicant respectfully submits that the combination of Takeuchi and Dent fails to teach or suggest this claimed feature.

Independent claim 31 requires, *inter alia*, calculating charges for one or both of the first and second customers by combining a cost dependent on network resources used in data transmission and an apportionment parameter.

While Takeuchi discloses determining charging information based on a calling location and receiving location, Takeuchi fails to teach or suggest calculating charges for one or both customers by combining the cost and a cost apportionment parameter. Dent fails to remedy this deficiency of Takeuchi.

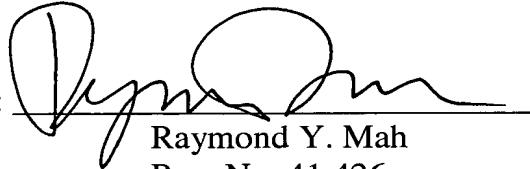
Accordingly, Applicant respectfully submits that claims 1, 4-33, 37 and 39 are not "obvious" over Dent and Takeuchi and respectfully requests that the rejection of these claims under 35 U.S.C. §103 be withdrawn.

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

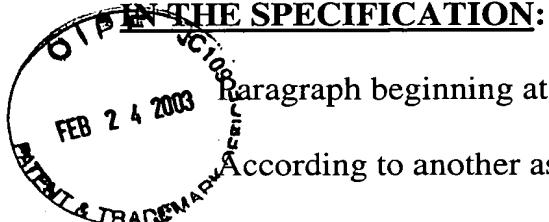
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VERSION WITH MARKINGS TO SHOW CHANGES MADE



IN THE SPECIFICATION:

Paragraph beginning at page 4, line 3 has been amended as follows:

According to another aspect of the present invention, there is provided a method of operating a network comprising a plurality of network domains, including calculating a charge for use by a respective customer of network resources, and making payment in settlement of the said charge to a third party clearer. This clearing payment may be used to apportion charges between the end users in any desired ratio, e.g. the sender pays all, or sender pays 60%, receiver pays 40%, etc.[.]

Paragraph beginning at page 4, line 10 has been amended as follows:

According to a further aspect of the present invention, there is provided a method of operating a packet network providing a plurality of different service levels, the method [including] including passing the said packets through a packet router, and in the packet router determining a classification of packets, scheduling packets differently depending on the packet classification and, at a location remote from the router, policing the service levels of packets to determine the eligibility of a packet for a respective service class.

IN THE CLAIMS:

1. (Amended) A method of operating a communications network comprising:

- a) measuring at each of a plurality of customer terminals usage by the respective customer terminal of network resources; [and]
- b) subsequently calculating a network usage charge from the measurement data generated by step (a)[.]; and
- c) sampling usage of the network resources by at least one of the customer terminals by measuring a portion of the usage only by the at least one of the customer terminals and comparing this measurement, with respect to the sampled usage, with one or both of the usage of network resources measured by the at least one customer terminal in step (a) and the network usage charge calculated in step (b).

4. (Twice Amended) A method according to claim 1, further comprising a step of aggregating measurement data produced by a series of measurements at a respective customer terminal.

10. (Twice Amended) A method according to claim [1] 7, [including a step] wherein sampling the usage is carried out by [the] a network operator [of] and comprises sampling part only of the traffic communicated between a customer terminal and the network and, for the sampled traffic, further comprises comparing the sampled network usage with data communicated from the customer terminal to the network accounting object and thereby detecting any discrepancy.

11. (Twice Amended) A method according to claim 1 in which a network accounting object is configurable to receive data from a measurement object controlled by [the] a network operator or from a customer terminal.

14. (Twice Amended) A method according to claim 1 further comprising communicating a tariff to each of the customer terminals, and calculating at each of the terminals from the tariff and from [the] accounting data the network usage charge.

27. (Amended) A method of operating a [federated] communications network comprising a plurality of network domains, the method including determining a price for a data transmission between one domain and an adjacent domain by:

- a) announcing, by the one domain, both a price for receiving the data from the adjacent domain and a price for transmitting data into the adjacent domain;
- b) announcing, by the adjacent domain, both a price for receiving data from the one domain and a price for transmitting data into the one domain;
- c) calculating an edge price for the data transmission from the difference between either the price for receiving announced in step (a) and the price for transmitting announced in step (b) or the price for

transmitting announced in step (a) and the price for receiving announced in step (b), depending on the direction of transmission of the data.